

EECS 16A Midterm 1 Review Session

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Disclaimer

Although some of the presenters may be course staff, the material covered in the review session may not be an accurate representation of the topics covered in and difficulty of the exam.

Slides are posted at @# on Piazza.

- These details should be written.

Matrices

Linear Transformations

Special Transformations: Rotation

Special Transformations: Reflection

Gaussian Elimination

Gaussian Elimination

Practice: Gaussian Elimination

Possible results of Gaussian Elimination on $A\vec{x} = \vec{b}$

Linear Independence

Linear Dependence

Linear Independence

Practice: Linear Independence

Span and Rank

Practice: Spans

Matrix Inverses

Computing Inverses: 2×2 Matrices

Practice: Computing Inverses

Vector Spaces

Practice: Is it a Vector Space?

Nullspace

Practice: Nullspace

Other Matrix Subspaces

Eigenvalues and Eigenvectors

Definition: Eigenvalues and Eigenvectors

Finding Eigenvalues and Eigenvectors

Practice: Eigenvalues and Eigenvectors

PageRank

Graphs, Flow, and Transition Matrices

Practice: Transition Matrices

Practice Problems

Bases in \mathbb{R}^3

Steady State